

REMARKS

Claims 1-36 and 39-44 remain pending in this application. Claims 1-36, 43, and 44 have been amended to define still more clearly what Applicants regard as their invention. Claims 37 and 38 have been canceled without prejudice or disclaimer of subject matter. Claims 1, 12, 23, and 29 are independent.

At paragraph 2 of the Office Action, the Examiner objected to the claims for lacking proper indentation. Applicants have corrected the claims accordingly and, therefore, withdrawal of this objection is respectfully requested.

At paragraph 3 of the Office Action, the Examiner objected to Claims 2-11 and 13-22 for matters of form.^{1/} Applicants have corrected Claims 2-11 and 13-22 accordingly and, therefore, withdrawal of this objection is respectfully requested.

At paragraph 4 of the Office Action, the Examiner objected to Claims 24-28 and 30-36 for matters of form.^{2/} Applicants have corrected Claims 24-28 and 30-36 accordingly and, therefore, withdrawal of this objection is respectfully requested.

Claims 43 and 44 were rejected under 35 U.S.C. § 101, as being directed to nonstatutory subject matter. Claims 43 and 44 now recite a computer-readable medium and, therefore, withdrawal of the Section 101 rejection is respectfully requested.

1/ While the Office Action states in paragraph 3 that "Claims 2-11 and 3-22" stand objected to, Applicants presume that this is a typographical error and that the Examiner meant to state "Claims 2-11 and 13-22".

2/ While the Office Action states in paragraph 4 that "Claims 13-22 and 30-34" stand objected to, Applicants presume that this is a typographical error and that the Examiner meant to state "Claims 24-28 and 30-36".

Claims 1-44 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, for the reasons given at paragraphs 8-22.

First, cancellation of Claims 37 and 38 renders the rejections of those claims moot.

Furthermore, it is noted that the Examiner's comments at paragraph 10 of the Office Action regarding the phrase "adapted to" do not apply to Claims 34 and 35, although those claims are included in paragraph 10.

It is also noted that the Examiner's comments at paragraph 18 of the Office Action regarding the recitation "A communication apparatus" do not apply to Claim 39, although that claim is included in paragraph 18.

With respect to the Examiner's comments at paragraphs 19 and 20 of the Office Action, it is affirmed that Claims 39-44 are dependent claims.

The claims have been carefully reviewed and amended as deemed necessary to ensure that they conform fully to the requirements of Section 112, second paragraph, with special attention to the points raised in paragraphs 8-22 of the Office Action. It is believed that the rejection under Section 112, second paragraph, has been obviated, and its withdrawal is therefore respectfully requested.

Claims 1-44 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. US 2003/0018818 to Boliek.

First, cancellation of Claims 37 and 38 renders the rejections of those claims moot.

Claim 1 is directed to a method of processing a request from a first communication apparatus connected through a communication network to a remote second communication apparatus, the method being implemented in the second apparatus. The method comprises receiving a request for obtaining digital data of a compressed digital signal that comprises header data and a signal body comprising data packets. The method also comprises processing the request including determining a position, in the body of the signal, of at least one data packet corresponding to the request as a function of the length of the header data and of at least one pointer marker present in the header data of the signal. The at least one pointer marker provides information for calculating the length of the part of the body preceding the data packet under consideration.

Among other notable features of Claim 1 are (1) receiving a request for obtaining digital data of a compressed digital signal that comprises header data and a signal body comprising data packets, and (2) processing the request including determining a position, in the body of the signal, of at least one data packet corresponding to the request as a function of the length of the header data and of at least one pointer marker present in the header data of the signal.

Boliek, as understood by Applicants, relates to a system including a server and a client connected through a communication network (see Figure 2). The Examiner cites paragraphs 0033, 0039, and 0043 of Boliek. As stated in paragraph 0039, a client provides requests to a server to obtain some amount of data corresponding to an image. The data being requested is part of a codestream such as a JPEG 2000 codestream, stored

as a file at the server. The server receives the request for bytes for a particular file and transmits them to the client.

More particularly, as stated in paragraph 0043 of Boliek in connection with the algorithm of Figure 3:

In one embodiment, the client specifies the data of the JPEG 2000 codestream that is needed by sending the starting point of the memory location at which the data is stored and the range of the amount of data that is requested. In an alternative embodiment, the starting and ending points of the memory locations storing the desired data are sent in the request.

Thus, it is clear from the above citation of Boliek that the client sends to the server a request including the location in the codestream of the desired data. As discussed in paragraph 0048, the server services the request. In particular, the server provides information to the client, including the requested bytes. Thus, once the server has received a request for data (data packets), its task is to extract from the signal the requested data packets located at the location indicated in the request.

In the method of Claim 1, an apparatus receives from a first communication apparatus (for example a client) a request specifying that a data packet is requested. In contrast to Boliek, in the method of Claim 1 the request does not specify the location of the requested data packet; in the method of Claim 1, the apparatus which receives and processes the request determines the position of the requested data packet in the signal. According to the method of Claim 1, determination of the requested data packet position

uses at least one pointer marker present in the signal, the aim of which is to provide the length of the part of the body preceding the requested data packet.

In Boliek, in contrast, there is no indication at all of using, at the server, a marker with a view to determining the location of the requested data packet in the signal.

Applicants have found nothing in Boliek that would teach or suggest (1) receiving a request for obtaining digital data of a compressed digital signal that comprises header data and a signal body comprising data packets, and (2) processing the request including determining a position, in the body of the signal, of at least one data packet corresponding to the request as a function of the length of the header data and of at least one pointer marker present in the header data of the signal, the at least one pointer marker providing information for calculating the length of the part of the body preceding the data packet under consideration, as recited in Claim 1.

Accordingly, Claim 1 is seen to be clearly allowable over Boliek.

Independent Claims 23 is a device claim corresponding to method Claim 1, and is believed to be patentable over Boliek for at least the same reasons as discussed above in connection with Claim 1.

Claim 12 is directed to a method of processing compressed digital data received by a first communication apparatus connected through a communication network to a remote second communication apparatus, the method being implemented in the first communication apparatus. The method includes receiving at least one data packet from a compressed digital signal present in the second apparatus and comprising a body that

comprises data packets. The method also includes determining a position at which the at least one data packet is to be inserted into the body of a compressed digital signal derived from the compressed digital signal present in the second apparatus and which is capable of containing all or part of the body of this compressed digital signal, the derived signal also comprising header data, the position being determined as a function of the length of the header data and of at least one pointer marker previously received and inserted into the header data of the signal by the first apparatus. The at least one pointer marker provides information for calculating the length of the part of the body preceding the at least one data packet. The method also includes inserting into the body of the derived signal the at least one data packet at the determined position.

Among other notable features of Claim 12 are determining the position, in a signal, of a received data packet and inserting in the signal the received data packet at the determined position using at least one pointer marker.

According to paragraphs 0033 and 0050 of Boliek (cited in the Office Action), data stored in the client apparatus may be spread out. When the coded data is to be decoded and this data may be spread out in storage, the header may indicate the location of each of the necessary part spread out through the memory, preferably through the use of pointers.

According to the method of claim 12, a received data packet or data packets from the second apparatus are to be inserted in the signal at a determined position. In contrast to Boliek, the method of Claim 12 does not retrieve the memory location of the

stored data packets in view of decoding them. In Boliek, it is not mentioned how the received data, which is received out of order, is stored into the client cache. Further, Boliek does not teach or suggest the use of pointer markers in order to determine the location of where to store the packets received by the client. According to Claim 12, at least one pointer marker which has been previously received by a first communication apparatus is used for determining the position at which the received data packet or data packets are to be inserted in the signal. Boliek, and in particular paragraphs 0033 and 0050 thereof, does not teach or suggest that pointers used for retrieving the location where data is stored have been previously received.

Applicants have found nothing in Boliek that would teach or suggest (1) receiving at least one data packet from a compressed digital signal present in a second apparatus and comprising a body that comprises data packets, (2) determining a position at which the at least one data packet is to be inserted into the body of a compressed digital signal derived from the compressed digital signal present in the second apparatus, the position being determined as a function of the length of the header data and of at least one pointer marker previously received and inserted into the header data of the signal by the first apparatus, and (3) inserting into the body of the derived signal the at least one data packet at the determined position, as recited in Claim 12.

Accordingly, Claim 12 is seen to be clearly allowable over Boliek.

Independent Claims 29 is a device claim corresponding to method Claim 12, and is believed to be patentable over Boliek for at least the same reasons as discussed above in connection with Claim 12.

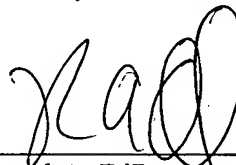
A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'RAD', written over a horizontal line.

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